Proposal Name: Mamaroneck and Sheldrake Rivers Basin Flood Risk Management – Construction Authorization

Submission Date: 09/16/2016

Proposal ID Number: d5cc22b9-f08a-4860-a18b-9e86c3e148ce

Purpose of Proposal: The Village of Mamaroneck (Westchester County, New York) suffered from severe floods in 1955, 1972, 1975, 2007 and 2011, causing extensive damage and loss of life. The combination of low channel capacity, small bridge openings, developmental encroachment along both rivers, urbanization and a poor flow conveyance at the confluence of the rivers contributed to significant and frequent flooding.

The Army Corps is nearing completion of a General Re-evaluation Study on the Mamaroneck-Sheldrake River Basin in the Village of Mamaroneck, NY. This study re-evaluates the plan authorized by WRDA 1986 and the design detailed in the General Design Memorandum of 1989. This re-evaluation study is required because considerable engineering, hydrological, hydraulic, economic and environmental data has changed in the Basin in the past 20+ years. In addition to New York State, the Village of Mamaroneck and Westchester County support an Army Corps project to better protect the Village from future floods. Total costs of constructing a new project are estimated at $81,844,100 (total), with the federal cost (65%) estimated at $53,198,665 and non-federal Costs (35%) projected to be $28,645,435. The non-federal costs are split 70-30 between NYSDEC and local partners.

The New York District of the Corps of Engineers has informed New York State that the current authorization, found in Section 401(a) of WRDA 1986, is not sufficient for construction of the Mamaroneck/Sheldrake project as proposed by the nearly completed “Mamaroneck and Sheldrake Rivers Basin, Village of Mamaroneck, Westchester County, NY, Flood Risk Management Final General Reevaluation Report and Environmental Impact Statement”. The New York District will finalize the report in October of 2016. NYSDEC is submitting this WRRDA 7001 authorization request to obtain a clear authorization for the construction of a project to protect the Village of Mamaroneck and its citizens from future storm events.
1. Administrative Details

Proposal Name: Mamaroneck and Sheldrake Rivers Basin Flood Risk Management – Construction Authorization

by Agency: New York State Department of Environmental Conservation

Locations: NY

Date Submitted: 09/16/2016

Confirmation Number: d5cc22b9-f08a-4860-a18b-9e86c3e148ce

Supporting Documents

<table>
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<tr>
<th>File Name</th>
<th>Date Uploaded</th>
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2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Letter of Support</th>
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<tbody>
<tr>
<td>New York State Department of Environmental Conservation (Primary)</td>
<td>The New York State Department of Environmental Conservation, along with Westchester County and the Village of Mamaroneck, NY, support the construction of an Army Corps project to protect the Village and its citizens from future floods.</td>
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3. State if this proposal is for a feasibility study, a modification to an authorized USACE feasibility study or a modification to an authorized USACE project. If it is a proposal for a modification, provide the authorized water resources development feasibility study or project name.

[x] Modification to an Authorized USACE Project: Mamaroneck and Sheldrake Rivers Basin Flood Risk Management
4. Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.

The Village of Mamaroneck (Westchester County, New York) suffered from severe floods in 1955, 1972, 1975, 2007 and 2011, causing extensive damage and loss of life. The combination of low channel capacity, small bridge openings, developmental encroachment along both rivers, urbanization and a poor flow conveyance at the confluence of the rivers contributed to significant and frequent flooding.

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5. To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.

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<tr>
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<th>Federal</th>
<th>Non-Federal</th>
<th>Total</th>
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<tbody>
<tr>
<td>Study</td>
<td>$4,988,250</td>
<td>$1,662,750</td>
<td>$6,651,000</td>
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<tr>
<td>Construction</td>
<td>$53,198,665</td>
<td>$28,645,435</td>
<td>$81,844,100</td>
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</table>

Explanation (if necessary)

The New York District of the Army Corps of Engineers will complete a GRR of the Mamaroneck-Sheldrake River Basin in October, 2016. This study will note the severe flood risk to the Village of Mamaroneck and will recommend the construction of an Army Corps project to protect the Village of Mamaroneck from future floods. The recommended project consists of channel modification work along the Mamaroneck and Sheldrake Rivers, with various channel widths, depths and lengths within the Village of Mamaroneck. A new WRDA authorization is needed for the construction of this project.
6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

A severe flood risk persists in the Village of Mamaroneck based on the recurrence of flood events and the damages sustained. Approximately 750 homes and businesses are located within the flood plain for the Mamaroneck and Sheldrake Rivers Basin within the Village of Mamaroneck and the Town of Harrison. The largest floods of record resulted from the storms of October 1955, June 1972, September 1975 and April 2007. In addition, there have been 19 significant floods from July 1889 to present.

Extensive damages and loss of life have occurred during these major flood events. Damages within the Mamaroneck and Sheldrake Rivers Basin for the June 1972 and September 1975 floods alone amounted to approximately $18M and $92M, respectively, based on conditions of development at the time and October 2015 price levels. The flood waters from these storms inundated large areas of industrial, commercial and residential property at the Village of Mamaroneck. Further, during the September 1992 flood, one person drowned when the car he was traveling in was swept away in a flow of water. Additionally, during the April 2007 storm, a person died in a house fire because flood waters prohibited emergency vehicles from responding to the person’s home to provide emergency and medical care. People have been continually evacuated from homes, businesses and vehicles during these damaging floods along both the Mamaroneck and Sheldrake Rivers. For example the April 2007 nor’easter flood, which was estimated to be a 100-year flood, damaged over 300 residential and 100 commercial structures and disrupted the lives of thousands of people through transportation delays and loss of income.

The Army Corps of Engineers has determined that a project to protect the Village is economically and technically justified. Pursuant to ER 1105-2-100, NYSDEC certifies that it has the ability to pay the non-federal cost share. NYSDEC will subcontract with Westchester County/Village of Mamaroneck as appropriate.
7. Does local support exist? If ‘Yes’, describe the local support for the proposal.

[ ] Yes

Local Support Description

Westchester County and the Village of Mamaroneck both support the construction of the project identified by the “Mamaroneck and Sheldrake Rivers Basin, Village of Mamaroneck, Westchester County, NY, Flood Risk Management Final General Reevaluation Report and Environmental Impact Statement”.

8. Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?

[ ] Yes